

AMENDMENTS TO THE CLAIMS

1. (Original) Process for producing amino acid derivatives which can be obtained by periodate oxidation, ozonolysis or Baeyer-Villiger oxidation of an unsaturated group, in which
 - (a) an organic amine, the amino functionality of which is protected, or an α -amino acid, the amino functionality of which is protected, is subjected to an electrochemical reaction so as to form an amine which is activated in the α -position;
 - (b) the activated amine is subjected to a reaction with a carbanionic reagent containing at least 3 carbon atoms and comprising an unsaturated group so as to form an unsaturated amine comprising an unsaturated group, the atom of the unsaturated group closest to the nitrogen being separated from the nitrogen by at least 2 carbon atoms;
 - (c) the unsaturated amine is subjected to oxidation of the unsaturated group so as to form an amino acid derivative, product of periodate oxidation, ozonolysis or Baeyer-Villiger oxidation of said unsaturated group.
2. (Original) Process according to Claim 1, in which the amino functionality is protected by a protective group comprising a carbonyl group.
3. (Previously Presented) Process according to Claim 2, in which the protective group is an acyl group.
4. (Previously Presented) Process according to Claim 2, in which the protective group is an alkoxycarbonyl group, an aryloxycarbonyl group or an aralkoxycarbonyl group.

5. (Previously Presented) Process according to Claim 1, in which the activated amine is obtained by electrochemical reaction in the presence of a nucleophile so as to form an amine substituted in the α -position with a nucleophilic substituent, as activated amine, and step (b) is carried out in the presence of a substitution catalyst.
6. (Previously Presented) Process according to Claim 5, in which the nucleophile is chosen from an alcohol and a carboxylic acid.
7. (Currently amended) Process according to Claim 1, in which an allyl carbanionic reagent is an allyltrialkylsilane, is used in step (b).
8. (Previously Presented) Process according to Claim 1, in which the unsaturated amine comprises a carbonyl group as unsaturated group.
9. (Previously Presented) Process according to Claim 1, in which the unsaturated amine comprises an olefin double bond as unsaturated group.
10. (Original) Process according to Claim 9, in which the oxidation is oxidative cleavage by ozonolysis.
11. (Previously Presented) Process for producing amino acid derivatives, comprising steps:
 - (a) a racemic amino acid derivative is produced according to the process of Claim 1;
 - (b) the enantiomers of the racemic amino acid derivative are separated.
12. (Previously Presented) Process according to Claim 11, in which the separation of the enantiomers is carried out by enzymatic reaction.

13. (Previously Presented) Process according to Claim 1, in which the product obtained is β -amino acid derivative.
14. (Previously Presented) Process according to Claim 2, in which the protective group is acetyl or phenylacetyl group.
15. (Previously Presented) Process according to Claim 2, in which the protective group is a tert-butyloxycarbonyl (BOC) group.
16. (Previously Presented) Process according to Claim 5, wherein said catalyst is a titanium compound.
17. (Previously Presented) Process according to Claim 5, in which the nucleophile is chosen from methanol and acetic acid.
18. (Previously Presented) Process according to Claim 12, wherein the enzymatic reaction is with a penicillinase or a lipase.
19. (New) Process according to Claim 1, wherein the amino acid derivatives are selected from the group consisting in β -homovaline, β -homophenylalanine, ϵ -trifluoroacetyl- β -homolysine, β -homolysine, β -homoaspartic acid, β -homoproline, pyrrolidine-2-acetic acid and 2-piperidineacetic acid.
20. (New) Process for producing amino acid derivatives selected from β , γ , δ , or ϵ -amino acids, having an amino functionality protected by a protective group comprising a carbonyl group, in which:

(a) the protected amino functionality is subjected to an electrochemical reaction so as to form an amine which is activated in the α -position;

(b) the activated amine is subjected to a reaction with a carbanionic reagent containing at least 3 carbon atoms and comprising an unsaturated group so as to form an unsaturated amine comprising an unsaturated group, the atom of the unsaturated group closest to the nitrogen being separated from the nitrogen by at least 2 carbon atoms;

(c) the unsaturated amine is subjected to oxidation of the unsaturated group so as to form an amino acid derivative.

21. (New) Process according to Claim 20, wherein the protective group is an acyl group.

22. (New) Process according to Claim 20, wherein the protective group is an acetyl or phenylacetyl group.

23. (New) Process according to Claim 20, wherein the protective group is an alkoxycarbonyl group, an aryloxycarbonyl group or an aralkoxycarbonyl group.

24. (New) Process according to Claim 20, wherein the protective group is a tert-butyloxycarbonyl (BOC) group.

25. (New) Process according to Claim 20, wherein the activated amine is obtained by electrochemical reaction in the presence of a nucleophile so as to form an amine substituted in the α -position with a nucleophilic substituent, as activated amine, and step (b) is carried out in the presence of a substitution catalyst.

26. (New) Process according to Claim 20, wherein the activated amine is obtained by electrochemical reaction in the presence of a nucleophile so as to form an amine substituted in the α -position with a nucleophilic substituent, as activated amine, and step (b) is carried out in the presence of a titanium compound.

27. (New) Process according to Claim 26, wherein the nucleophile is chosen from an alcohol and a carboxylic acid.

28. (New) Process according to Claim 26, wherein the nucleophile is methanol or acetic acid.

29. (New) Process according to Claim 20, wherein an allyl carbanionic reagent is used in step (b).

30. (New) Process according to Claim 20, wherein an allyltrialkylsilane is used in step (b).

31. (New) Process according to Claim 20, in which the unsaturated amine comprises a carbonyl group as unsaturated group.
32. (New) Process according to Claim 20, in which the unsaturated amine comprises an olefin double bond as unsaturated group.
33. (New) Process according to Claim 32, in which the oxidation is oxidative cleavage by ozonolysis.
34. (New) Process according to Claim 20, in which the product obtained is a β -amino acid derivative.
35. (New) Process according to Claim 33, in which the product obtained is a β -amino acid derivative